SUSPENSION BEAM

FOR USE WITH BASIC OR ADVENT LYTESPAN® TRACK SYSTEMS ONLY

INSTRUCTION SHEET NO.
IS:6440
R0790

READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE PROCEEDING.

This fixture is intended for installation in accordance with the National Electrical Code and local regulations. To assure full compliance with local codes and regulations, check with your local electrical inspector before installation. To prevent electrical shock, turn off electricity at fuse box before proceeding.

Retain these instructions for maintenance reference.

Suspension Beam is a system of extruded aluminum housings which enclose Basic Lytespan (1 circuit) or Advent Lytespan (2 circuit) Track. The housings may be used individually, in continuous runs or in a variety of patterns. They may be suspended on cables or stems. They may also be mounted wall to wall without ceiling supports in spans up to 12'.

The housings may be cut, but must be straight and square. The cut end of a housing may be attached to another housing or to a housing/splice box. Power cannot be fed into the cut end of a housing from a cable or stem kit.

CAUTION:

- **TURN OFF POWER AT FUSE BOX BEFORE INSTALLING TRACK.**
- **INSTRUCTIONS FOR GROUNDING PER INSTRUCTION SHEET OF THE FEED-IN KIT MUST BE FOLLOWED. FAILURE TO DO SO MAY RESULT IN A HAZARDOUS CONDITION.**
- **DO NOT SUPPLY ADVENT TRACK FROM TWO SEPARATE 120V BRANCH CIRCUITS AS THIS COULD OVERLOAD THE NEUTRAL TRACK CONDUCTOR LEADING TO AN ELECTRICAL SAFETY HAZARD.**
- **OBSERVE POLARITY, WHITE SUPPLY LEAD (NEUTRAL) TO CONTACT ON BEAD SIDE OF TRACK.**
- **REFER TO LOAD DATA, PAGE 4, FOR MAXIMUM SUSPENSION BEAM LOADING.**

INSTALLATION OF SUSPENSION BEAM WITH CABLE OR STEM KITS

Power may be fed from cables or stems through either end of straight run of housings, including the end of a housing attached to a housing/splice box.

MOUNTING CABLE KITS TO CEILING

Lay out cables so they will be uniformly spaced along housings; do not exceed 8' spacing. In an open pattern locate first and last cables approximately 1' from the ends. Cables are **NOT RECOMMENDED** for straight runs.

Locate cable with electrical feed no closer than 6" and no further than 10" from the end of housing to which power is to be fed. The 10" distance permits the supply leads to reach the wiring compartment and may be increased by the amount the cable kit is shortened on the job.

1. To shorten cables, crimp LOOSE CABLE CLAMP (with diagonal cutters) at desired position and cut off excess cable.
2. Fasten TRACK CLAMPS to SPECIAL SCREW with washer and nut.
3. a. CABLE KIT WITH ELECTRICAL FEED:
   Splice SUPPLY LEADS to branch circuit leads in outlet box (white to white, black to black, red to red for Advent) and fasten GROUND WIRE to outlet box. Cap or cut red lead when using Basic Track. Fasten MOUNTING PLATE to outlet box with outlet box screws.
   b. CABLE KIT: fasten MOUNTING PLATE to ceiling with TOGGLE BOLT.
4. Screw UPPER COLLAR to MOUNTING PLATE and tighten set screw

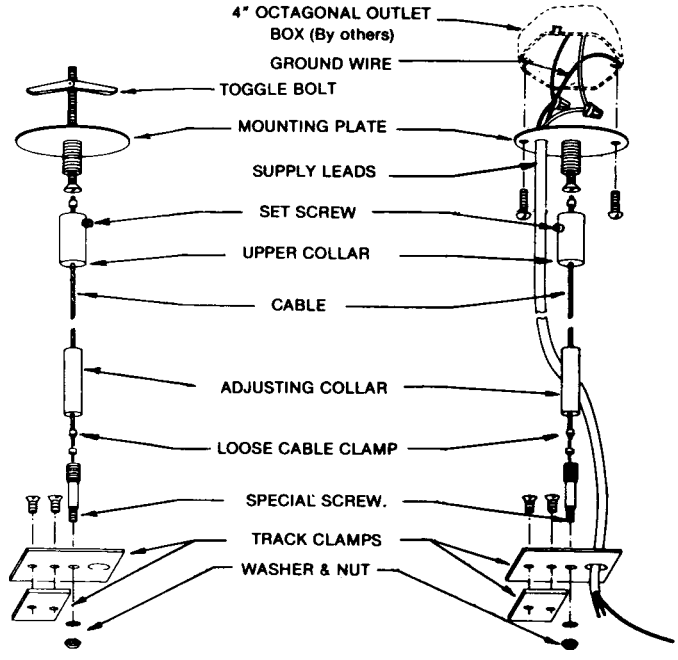


FIG. 1

MOUNTING STEM KITS TO CEILING

Lay out stems so they will be uniformly spaced along housings; do not exceed 8' spacing. In a straight run or an open pattern locate first and last stems approximately 1' from the ends. Locate stem for power feed at least 6" from the end of the housing to which power is to be fed.

See Instruction Sheet packed with STEM KIT for instructions on shortening stems, mounting stems to ceiling and installing the STEM EXTENSION KIT. Make sure supply leads (not supplied) from stem are long enough to reach the feed-in point to the track.

INSTALLATION OF SUSPENSION BEAM WITH CABLE OR STEM KITS (Cont'd.)

MOUNTING HOUSINGS TO CABLES OR STEMS

1. Loosen screws in TRACK CLAMPS and insert clamps into HOUSING, engaging upper ribs between clamps. Slide HOUSING to position desired.
2. Cable length may be adjusted up to ½" by turning ADJUSTING COLLAR.
3. Pass supply leads (from cable or stem used for power feed) along top of HOUSING, through hole in WIREWAY COVER BRACKET and down through slot in end of HOUSING through which power is to be fed into track.
4. Tighten screws in TRACK CLAMPS after HOUSING installation is completed.

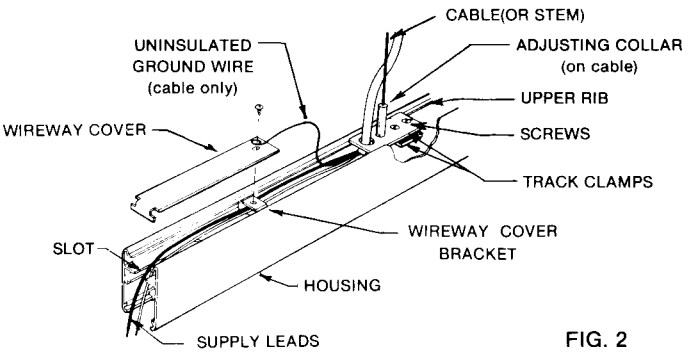


FIG. 2

ASSEMBLING HOUSINGS IN STRAIGHT RUNS

1. Remove END PLATE and WIREWAY COVER from adjacent ends of HOUSINGS. Insert COUPLER and SPLINES halfway into one of the HOUSINGS and tighten set screws to secure COUPLER to HOUSING.
2. Slide second HOUSING onto COUPLER and SPLINES and tighten remaining set screws in COUPLER.
3. Add additional HOUSINGS to run in the same manner.
4. Tighten screws in TRACK CLAMPS of cables or stems after HOUSING installation is completed, see Fig.2

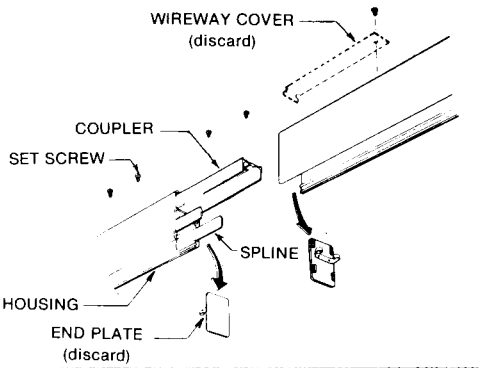


FIG. 3

ASSEMBLING HOUSINGS TO HOUSING/SPLICE BOXES

1. Insert COUPLERS and SPLINES halfway into HOUSING/SPLICE BOX and secure COUPLERS with CLAMPS.
2. Remove END PLATE from HOUSING and re-mount WIREWAY COVER BRACKET to second hole. Slide HOUSING onto COUPLER and SPLINES and secure to COUPLER with CLAMP.
3. Tighten screws in TRACK CLAMPS of cables or stems after HOUSING installation is completed, see Fig. 2.

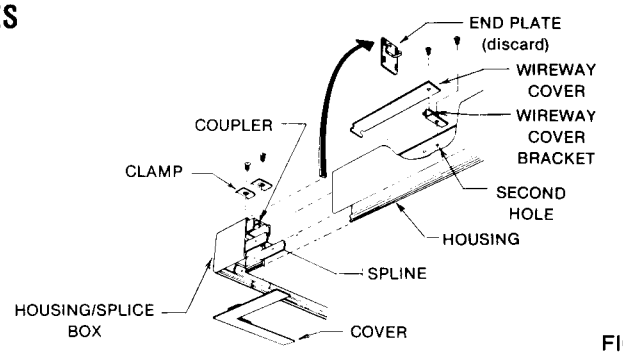


FIG. 4

INSTALLATION OF SUSPENSION BEAM WITH WALL MOUNTING KIT

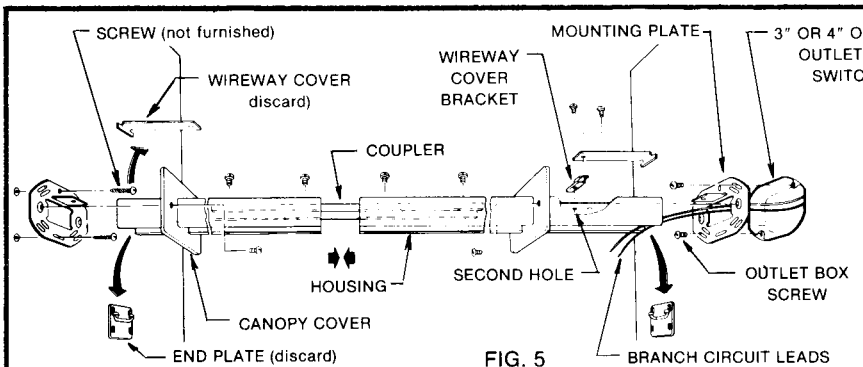


FIG. 5

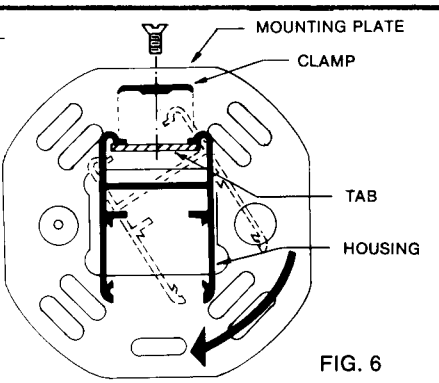


FIG. 6

For straight runs. Supports up to 12' span without ceiling supports.

1. Fasten MOUNTING PLATES to outlet box and to opposite parallel wall. Outlet box should be securely fastened and mounting surface should be solid to accept mounting screws.
2. In a run of HOUSINGS, join HOUSING together as previously described. Use COUPLER furnished with WALL MOUNTING KIT (discard COUPLER furnished with HOUSING). Install COUPLER with flat side down.
3. Remove END PLATES from HOUSING(S). Mount WIREWAY COVER BRACKET, at feed-in end, to second hole in HOUSING. Remove WIREWAY COVER from other end.
4. Measure the distance between the MOUNTING PLATES. Cut HOUSING, at end without WIREWAY COVER, so that its length (or the length of the run of HOUSINGS) is not less than $^{3}/_{16}$" than this distance.
5. Slip CANOPY COVERS onto HOUSING(S) and twist HOUSING(S) onto TABS on MOUNTING PLATES, see Fig. 6. Lock in place with CLAMPS.
6. Mount CANOPY COVERS to MOUNTING PLATES and pull branch circuit leads (solid wire only) out of outlet box.

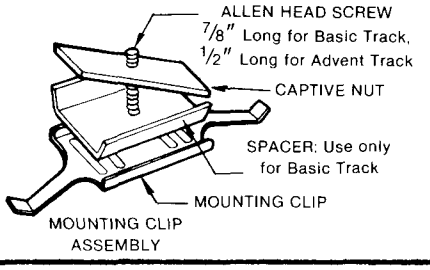
INSTALLATION OF BASIC OR ADVENT LYTESPAN TRACK INTO HOUSINGS

Each straight run of track is started with an INDIVIDUAL TRACK UNIT and continued with JOINER TRACK UNITS.

To cut track, see Instruction Sheets supplied with Track. IS:6020 or IS:6121.

ASSEMBLE MOUNTING CLIPS TO TRACK

1. Prepare MOUNTING CLIP ASSEMBLIES as shown.
2. Remove DEAD END COVER from INDIVIDUAL TRACK UNITS, see Fig. 8. Insert MOUNTING CLIPS into end of each track unit and slide along track until ends of clips engage alignment holes. Check that allen head screw lines up with hole in track.



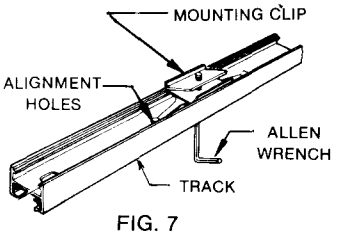


FIG. 7

INSTALLING TRACK INTO A SINGLE HOUSING

1. Unscrew BOTTOM COVER and remove KO from top plate on LIVE END. Reinsert DEAD END COVER into other end of track.
   NOTE: See Instruction Sheet supplied with track for additional instructions on installing supply leads into LIVE END.
2. Pass supply leads through openings in LIVE END observing polarity. Insert track into HOUSING and tighten screws in MOUNTING CLIPS with allen wrench to lock track in place.
3. Fasten BOTTOM COVER to LIVE END. Connect SUPPLY LEADS to screw terminals as shown in track IS:6020 or IS:6121.

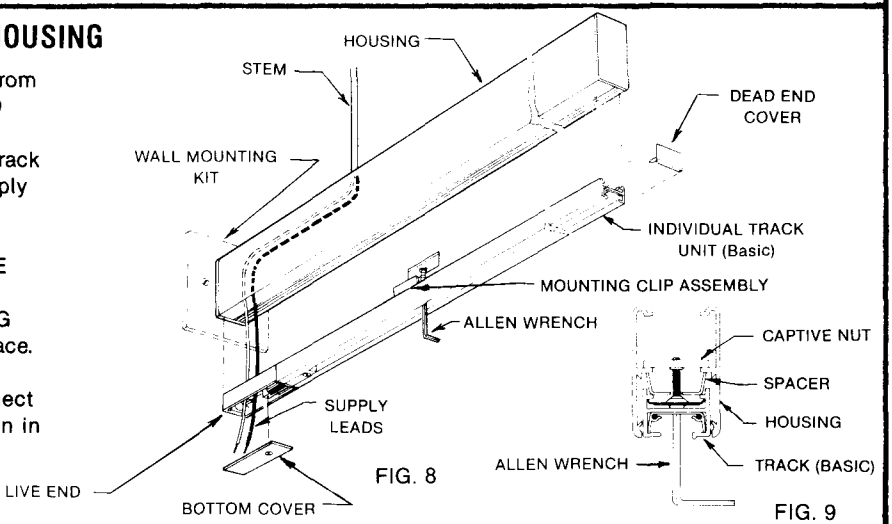


FIG. 8

FIG. 9

INSTALLING TRACK INTO A STRAIGHT RUN OF HOUSINGS

1. Follow previous instructions except do not reinstall DEAD END COVER.
2. Remove END PLATE from HOUSING. Insert JOINER TRACK into HOUSING, plug COUPLER into INDIVIDUAL TRACK UNIT and tighten screws in MOUNTING CLIPS with allen wrench. Repeat for all JOINER TRACK UNITS in run.
3. Tighten screw in COUPLER(S). Insert DEAD END COVER into end of track run and insert END PLATE into end of HOUSING.

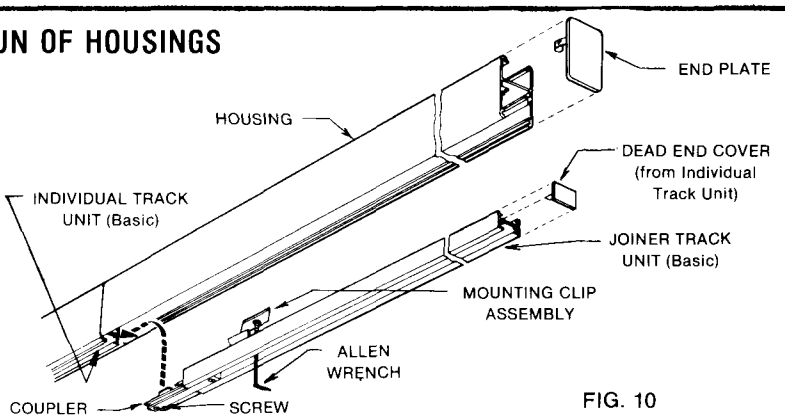


FIG. 10

INSTALLING TRACK INTO HOUSINGS IN PATTERNS

1. Remove LIVE ENDS from all INDIVIDUAL TRACK UNITS.

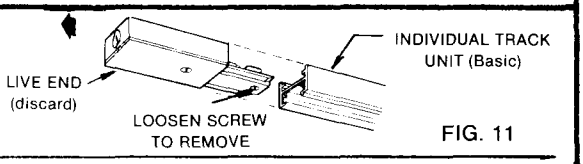
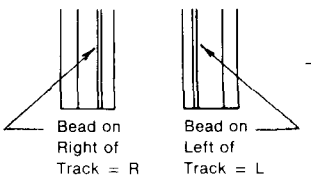


FIG. 11

2. Lay out the track per the layout of the HOUSINGS following the track orientation shown in Fig. 12. Note that each straight run of track consists of an INDIVIDUAL plus JOINERS.



TRACK ORIENTATION

Corner	"T" Intersection	"X" Intersection
One left and one right.	One left and two rights or one right and two lefts.	Two rights and two lefts.
example	example	example

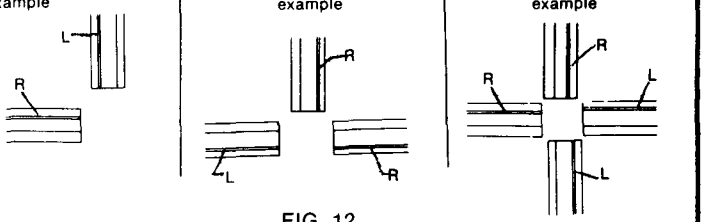


FIG. 12

INSTALLATION OF BASIC OR ADVENT LYTESPAN TRACK INTO HOUSINGS (Cont'd.)

INSTALLING TRACK INTO HOUSINGS IN PATTERNS

3. Insert AUX. ELECTRICAL CONNECTORS into track units at corners and intersections, POLARITY KEY points away from BEAD.
   NOTE: One extra AUX. ELECTRICAL CONNECTOR will be discarded when used with "T" HOUSING/SPLICE BOX.

4. Insert DEAD END COVERS into the end of track units not adjacent to corners or intersections.

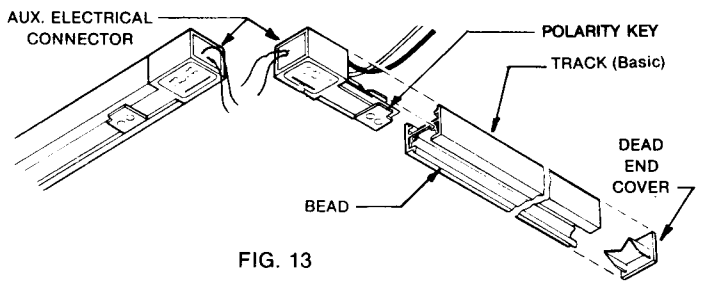


FIG. 13

5. Insert INDIVIDUAL TRACK UNITS into appropriate HOUSINGS and tighten screws in MOUNTING CLIPS with allen wrench to lock track in place.

6. In each straight run of HOUSINGS, insert JOINER TRACK UNIT into HOUSING, plug COUPLER into INDIVIDUAL TRACK UNIT and tighten screws in MOUNTING CLIPS and COUPLERS. Repeat for all JOINER TRACK UNITS in run.

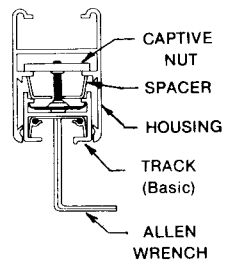


FIG. 15

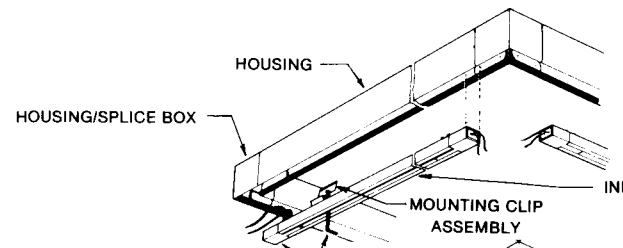


FIG. 14

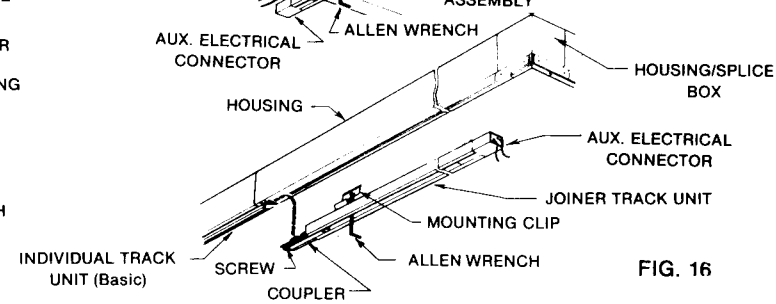


FIG. 16

7. Splice leads from AUX. ELECTRICAL CONNECTORS to supply leads (for power feed) or to each other (for power continuity). Follow color code white to white, black to black and for ADVENT, red to red.

   Cap any unused leads from AUX. ELECTRICAL CONNECTOR(S).

8. Push leads into HOUSING/SPLICE BOXES and insert COVERS.

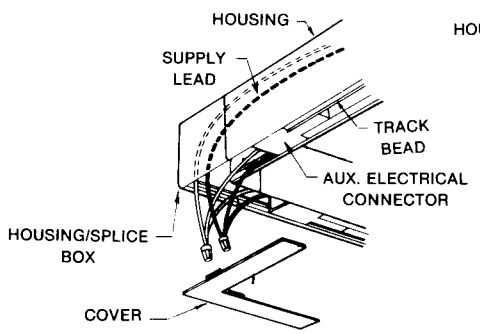


FIG. 17
POWER FEED

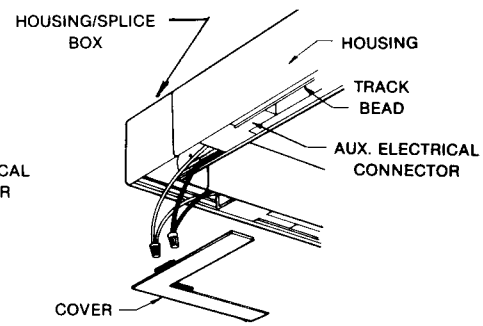


FIG. 18
POWER CONTINUITY

INSTALLATION OF COVER FOR HOUSING OPENING

COVER is installed in HOUSINGS without track. Cut COVER if required. In patterns, cut COVER to distance between the COVERS for the HOUSING/SPLICE BOXES. COVER snaps into HOUSING.

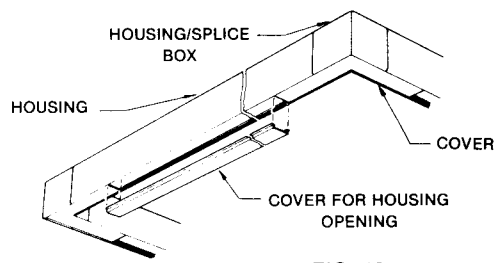


FIG. 19

LOAD DATA

SUSPENSION BEAM MOUNTING	MAXIMUM LOAD
Cables or Stems, spaced 8 Ft. apart	5 lb. Lytespots on 1 Ft. Spacing
Wall Mounting Kit, 12 Ft. Span	5 lb. Lytespots on 3 Ft. Spacing or 3.5 lb. Lytespots on 2 Ft. Spacing

Most Lytespots weigh under 3 lbs.